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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,252	08/11/2006	Anders Edgren	PD53612US01	6926

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EXAMINER

TRINH, TAN H

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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03/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,252

Applicant(s)

EDGREN, ANDERS

Examiner

TAN TRINH

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 08-11-2006, the information disclosure statement has been considered by the examiner.

Specification

2. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In this case, the limitations of the claims 8 and 9 are the same.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-5, 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Dufosse (U.S. Pub. No. 2002/0136398).

Regarding claim 1, Dufosse teaches an electro-acoustic communications unit for producing desired frequency characteristics in alert and phone mode (see fig. 1, page 2, sections [0032-0034]), comprising: a housing with a wall defining an interior (see fig. 1, page 2, sections [0032-0035]), having a certain volume page 1, sections [0005-0013] and page 2, section [0033]),

Art Unit: 2618

and an exterior (see page 2, sections [0032-0034]), an acoustic driver for generating acoustic signals (see page 1-2, sections [0005 and 0032- 0033]), the acoustic driver being mounted to the wall (see fig. 1, page 2, sections [0032-0036]), an acoustic port (7-8) (see fig. 1, page 1, sections [0032-0033]), having a length and a cross-sectional area (see fig. 1, page 1-2, sections [000010-0013 and [0032-0039]), the port (7-8) penetrating the wall (6) and connecting the interior (3) of the housing with the exterior of the housing (see fig. 1, page 2, sections [0032-0039]), wherein the housing defined by the wall is tightly sealed and that the volume, length and cross-sectional area are dimensioned in relation to the acoustic driver in a way such that the electro-acoustic communications unit achieves desired frequency characteristics in the phone mode (see fig. 1, page 1-2, sections [0014-0016, 0032-0039]), that is when engaging the exterior end of the acoustic port of the electro-acoustic communications unit with a user's ear (see fig. 1-2, page 2, sections [0032-39]), wherein the desired frequency characteristics comprises an increase of the high-frequency performance level relative to the performance of a communications unit alone (see fig. 1-2, page 2, sections [000036-0039]). In this case, the transducer 4 is including the acoustic driver.

Regarding claim 3, Dufosse teaches the acoustic port (7 and 8) is adapted to make use of the acoustic signals driven into the interior of the housing (see fig. 1-2, page 2, sections [0032-0038]).

Regarding claim 4, Dufosse teaches the acoustic signals generated by the second side of the driver, are directed to dissipate without being used by the user (see fig. 1, page 2, section [0034]).

Regarding claim 5, Dufosse inherently teaches the volume (3) of the housing is of the order of between 0.5 and 10 cubic centimeters (cm.sup.3), the length (L) of the acoustic port of the order of between 0.5 and 20 centimeters (cm) and the cross-sectional area (A) or the acoustic port of the order of between 1 and 120 square millimeters (mm.sup.2) (see fig. 1, page 2, sections [0036-0039]).

Regarding claim 6, Dufosse teaches the portable communication device comprising an electro-acoustic communications unit (see fig. 1, page 1, sections [0031-0032]).

Regarding claim 7, Dufosse teaches the portable communication device is a mobile phone (see fig. 1, page 1-2, sections [0005, 0011 and 0031-0032]).

Regarding claim 8, Dufosse teaches the portable communication device is adapted to attenuate the acoustic signals generated by an exterior side of the driver (4), with respect to the housing wall (6) (see fig. 1, page 1, sections [0007-0010]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2618

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dufosse (U.S. Pub. No. 2002/0136398) in view of Minervini (U.S. Pub. No. 2006/0116180).

Regarding claim 2, Dufosse teaches the acoustic driver (4) has a first side directed towards the interior of the housing defined by the wall (6), and a second side directed towards the exterior (7-8) of the housing defined by the wall (6) (see fig. 1-2), and wherein the first side of the acoustic driver (4) is arranged to drive acoustic signals into the interior of the housing (see fig. 1, page 2, sections [0032-0036]). In this case, the cavity 3 can be the first side directed towards the interior of the housing defined by the wall.

However, related art Minervini teaches the acoustic driver (410 or 510) has a first side directed towards the interior of the housing defined by the wall (516), and a second side directed towards the exterior of the housing defined by the wall (520) (see fig. 6C and 7A), and wherein the first side of the acoustic driver (410 or 510) is arranged to drive acoustic signals into the interior of the housing (402 or 502) (see fig. 6C and 7A-C, page 4-5, section [0047-0050], and [0053-0057]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify of above teaching of Dufosse with Minervini, in order to allow acoustic energy to be coupled to the SMC 510 and allow the acoustic wave to enter to housing 502 (see suggested by Minervini on page 5, section [0056-0057]).

Art Unit: 2618

Conclusion

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to the Customer Service Window (now located at the **Randolph Building, 401 Dulany Street, Alexandria, VA 22314**).*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Art Unit: 2618

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh
Division 2618

/TAN TRINH/
Primary Examiner, Art Unit 2618
02-28-2008

A handwritten signature in black ink, appearing to read 'Tan H. Trinh', with a stylized flourish at the end.